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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/059,219	01/31/2002	Satoshi Kawashima	111694	6022

7590 09/21/2004

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EXAMINER

KIANNI, KAVEH C

ART UNIT	PAPER NUMBER
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2883

DATE MAILED: 09/21/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/059,219

Applicant(s)

KAWASHIMA, SATOSHI

Examiner

K. Cyrus Kianni

Art Unit

2883

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 June 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2 and 10-13 is/are rejected.
- 7) ☒ Claim(s) 3-9 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 January 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Allowable Subject Matter

1. Claims 3-9 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim 3 is allowable because the prior art of record, taken alone or in combination, fails to disclose or render obvious wherein the substance is gel in combination with the rest of the limitations of the base claim.

Claim 4 is allowable because the prior art of record, taken alone or in combination, fails to disclose or render obvious wherein the substance is liquid in combination with the rest of the limitations of the base claim.

Claim 5 is allowable because the prior art of record, taken alone or in combination, fails to disclose or render obvious wherein the substance is gaseous substance in combination with the rest of the limitations of the base claim.

Claim 6 is allowable because the prior art of record, taken alone or in combination, fails to disclose or render obvious the cushioning material is of a gel substance in combination with the rest of the limitations of the base claim.

Claim 7 is allowable because the prior art of record, taken alone or in combination, fails to disclose or render obvious wherein the cushioning material is of a liquid substance in combination with the rest of the limitations of the base claim.

Art Unit: 2883

Claim 8 is allowable because the prior art of record, taken alone or in combination, fails to disclose or render obvious wherein the cushioning material is of a gaseous substance in combination with the rest of the limitations of the base claim.

Claim 9 is allowable because the prior art of record, taken alone or in combination, fails to disclose or render obvious wherein the cushioning material comprises a plurality of a gaseous substance is of a gaseous substance in combination with the rest of the limitations of the base claim.

Claim Rejections –

35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-2 and 10-13 are rejected under 35 U.S.C. 102(e) as being unpatentable over Kubo et al. (US 6456279).

Regarding claims 1 and 13, Kubo teaches a spread illuminating apparatus over which a touch panel is disposed (see at least fig. 7, and col. 1, 1st parag.); comprising: a transparent substrate 40b made of a light-transmissible material and having a light reflection pattern having a number of ridges 8 formed on at least one surface thereof

Art Unit: 2883

(shown at least in fig. 7, item reflecting patterned ridges formed on the surface of the transparent substrate 40b, see col. 10, lines 12-19);

and a bar-like light source 3A disposed close to an end surface of the transparent substrate 40b,

wherein a cover 40a formed of a light-transmissible material is integrally provided over the one surface of the transparent substrate 4b (shown in fig. 7, item 40a, see col. 9, lines 48-59) sandwiching a resin material consisting of a light-transmissible substance in such a manner that the number of ridges are directly covered with the resin material (see fig. 7, item 40f, see specifically col. 10, lines 12-24) and the cover constitutes a lower electrode 40c substrate of the touch panel (see fig. 7, item 40c, see col. 9, lines 45-59).

However, Kubo does not explicitly teach wherein the above resin material is a cushion material. Nevertheless, Kubo states that the above material is made of polyimide-base resin (polymeric material) which used as a smoothing material in the touch panel (see col. 10, lines 12-24 and col. 23 lines 3-8). Thus, it is obvious/well-known to those of ordinary skill in the art that a material used in an optical device as a smoothing element for supporting other elements of the optical device is/would-act as a cushioning material, since such material would provide high quality image display with improved brightness of the touch screen (see col. 3, 5th parag.).

Regarding claims 2 Kubo further teaches wherein the resin material is of a substance with low refractive index (see col. 10, lines 20-24).

4. Claims 10 -11 are rejected under 35 U.S.C. 103(a) as being unpatentable over combination of Kubo et al. and Egawa et al. (US 6,295,104).

Regarding claims 10 -11, Kubo teaches, as stated above, all limitations that claims 10-11 depend on. Kubo further teaches wherein the cover 40a is formed of a soft material (see col. 9, lines 34-36). However, Kubo does not specifically teach wherein the cover is formed of a hard material/glass. Egawa teaches a spread illuminating apparatus (shown at least in figures 1 and 9; see abstract) wherein the cover 2 is formed of a hard material/glass (see fig. 9 item 2 and see col. 12, lines 12-19; also see col. 1, lines 46-61). Thus, Egawa provides spread illumination member(s) for spread illuminating apparatus that suppress the degradation of the contrast and the generation of moiré pattern which may make the observation of an image difficult (see col. 4, lines 11-17). Thus, it would have been obvious to a person of ordinary skill in the art when the invention was made to modify Kubo's illumination apparatus by substituting the soft cover 40A with that of Egawa's hard/glass cover 2 in order to produce a spread illumination apparatus that includes the above limitations, since such modification conventionally provides touch panel image display which its display surface area is uniformly illuminated so that a high-quality image display can be obtained and the brightness of the screen can be improved (see col. 3, lines 23-32); and wherein the cover material do equally well with the function of the illuminating apparatus and since it has been held to be within the general skill of a worker in the art to select a known

Art Unit: 2883

material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416.

5. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over combination of Kubo et al. and Hoshino et al. (US 6,323,923).

Regarding claim 12, Kubo teaches, as stated above, all limitations that claim 12 depends on. Kubo further teaches wherein the cover 40A is formed of soft transparent material (see fig. 7, item 7 and col. 9, lines 56-57). However, Kubo does not specifically teach wherein the cover is of a transparent polymer. This limitation is taught by Hoshino. Hoshino teaches a display panel (shown in fig. 1a) that comprises transparent polymer substrate/cover 13 (see col. 4, lines 48-50). Thus, Hoshino provides a low cost display cover having good visibility (see col. 2, lines 37-39). Thus, it would have been obvious to a person of ordinary skill in the art when the invention was made to modify Kubo's display device by replacing its soft transparent cover 40ab with that of Hoshino's transparent polymeric cover 13 in order to have a display device that includes above limitation, since such modification is conventional and would improve the coordinate recognition characteristics of the liquid crystal touch panel (279'; see col. 3, lines 23-26); and since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416.

Response to Arguments and Amendment

6. Applicant's argument filed on 6/25/04 have been fully considered but, except for claims 3-9, they are not persuasive.

Applicant asserts (page 1, 5th parag. and page 5, 2nd parag.) that Kubo does not teach cushioning material and that such a material consists of light-transmissive substance in such a manner that the number of ridges are directly covered with the cushioning material. The examiner responds that although Kubo does not explicitly states that the resin material is a cushioning material, nevertheless, Kubo states that the material 40f is made of polyimide-base resin (polymeric material) which used as a smoothing material in the touch panel (see col. 10, lines 12-24 and col. 23 lines 3-8) and that as seen it at least fig. 7, it consists of light-transmissive substance in such a manner that the number of ridges 8 directly covered with the smoothing material 40f. Thus, it is obvious/well-known to those of ordinary skill in the art that a material used in an optical device as a smoothing element for supporting other elements of the optical device is/would-act as a cushioning material.

In response to applicant's arguments (page 6-7) that none of Egawa nor Hoshino teach cushioning material consists of light-transmissive substance in such a manner that the number of ridges are directly covered with the cushioning material in order to cure the shortcomings of Kubo, the examiner responds that such a limitation as discussed above is taught by Kubo and that a cover material whether to be made of glass or polymer is not the essential feature of the invention and that such a cover formed of glass/polymer is conventional and it is taught by Egawa/Hoshino.

THIS ACTION IS MADE FINAL

7. This action in response to applicant's amendment made FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a). A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Contact Information

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to K. Cyrus Kianni whose telephone number is (571) 272-2417.

The examiner can normally be reached on Monday through Friday from 8:30 a.m. to 6:00 p.m. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Frank Font, can be reached at (571) 272-2415.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
Washington, D.C. 20231

or faxed to:

(703) 872-9306 (for formal communications intended for entry)

or:

Hand delivered responses should be brought to Crystal Plaza 4, 2021 South Clark Place, Arlington, VA., Fourth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application should be directed to the Group Receptionist whose telephone number is (703) 308-0956.



K. Cyrus Kianni
Patent Examiner
Group Art Unit 2883

Frank Font
Supervisory Patent Examiner
Group Art Unit 2883

September 15, 2004